



IOWA MONTHLY WEATHER SUMMARY – MARCH 2017

General Summary. Temperatures averaged 37.0° or 1.1° above normal while precipitation totaled 2.55 inches or 0.40 inches greater than normal. This ranks as the 37th warmest and 40th wettest March among 145 years of records. A wetter March was last recorded in 2009 and a warmer one in 2012.

Temperatures. As is typical of the early spring season, there were some dramatic temperature fluctuations during the early and mid-portion of the month. Temperatures fell to 7° at Cresco on the morning of the 3rd with afternoon highs three days later climbing to 80° at Little Sioux and Sioux City on the 6th. The month's largest temperature extremes came just four days apart with a low of -9° at Stanley, Spencer, Estherville and Forest City on the morning of the 15th while Sidney recorded an afternoon high of 84° on the afternoon of the 19th. The last week of the month, however, saw very little fluctuation in temperatures as persistent cloud cover and frequent rain kept temperatures in the forties and fifties for most of the period.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged 22% greater than last March but 4% less than normal. Heating degree day totals thus far this heating season (since July 1, 2016) are running 2% less than last season at this time and 16% less than normal.

Precipitation. There were a pair of statewide precipitation events during the first one-half of the month with light snow falling over far northwest Iowa on the 6th and light to moderate rain elsewhere with a few scattered locations receiving almost an inch of rain. Snow fell statewide on the 12th-13th with a maximum of 10.4 inches recorded at the Waterloo Airport to only trace amounts along the Missouri border. Precipitation, nearly all in the form of rain, was frequent during the final eight days of the month with the largest event coming on the 29th-30th with a statewide average of 0.93 inches of rain. Monthly precipitation totals varied from 1.14 inches at Le Mars to 4.41 inches at De Witt. Below normal precipitation amounts were mostly confined to the north one-third of the state, a welcome break from the wetter than normal pattern that has dominated that area of Iowa for much of the time since last summer. Snowfall averaged 4.2 inches or 0.5 inches less than normal. This ranks as the 56th lowest March snow amount among 130 years of record. As has been the case all winter, very little snow fell across the far southern portion of the state during March.

Severe Weather. An unusually widespread severe storm outbreak for so early in the year came on the afternoon and evening of the 6th. Severe weather was reported from 63 of Iowa's 99 counties with 18 tornadoes reported by the National Weather Service including six of EF-2 intensity. This was a new record for most tornadoes reported in Iowa during March (old record 17 in 1990). Additionally, large hail was reported from nine northern Iowa counties during the day on the 23rd.

Harry J. Hillaker, State Climatologist
Iowa Dept. of Agriculture & Land Stewardship
Wallace State Office Bldg.; Des Moines, IA 50319
Telephone: (515) 281-8981; E-mail: Harry.Hillaker@IowaAgriculture.gov

March 2017

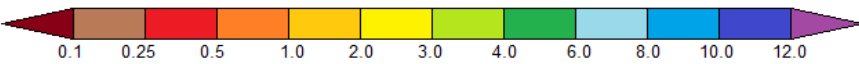
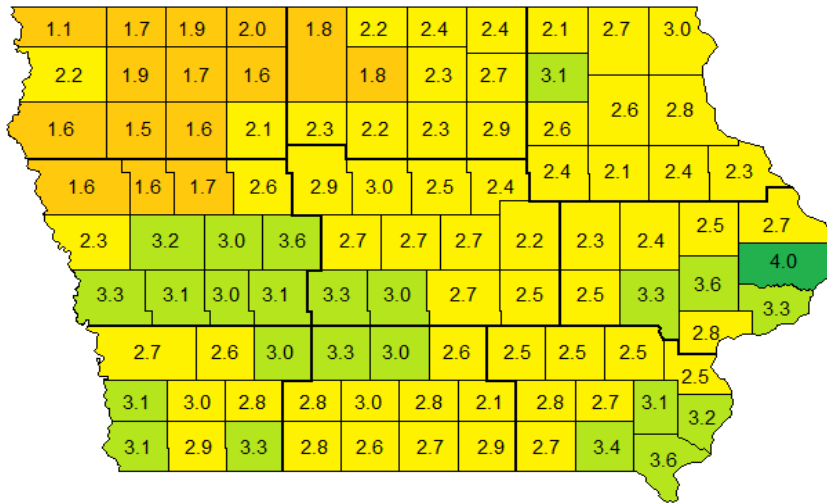
WEATHER BY DISTRICTS

| DISTRICT | TEMPERATURE (F) | | HEATING DEGREE DAYS | | | | PRECIPITATION (inches) | | | | SNOWFALL Mar 2017 Average |
|---------------|-----------------|------------|---------------------|------------|---------------------|------------|------------------------|------------|-------------------|------------|---------------------------------|
| | March 2017 | | March 2017 | | Since Jul., 1, 2016 | | March 2017 | | Since Jan.1, 2017 | | |
| | Average | Departure* | Average | Departure* | Average | Departure* | Average | Departure* | Average | Departure* | |
| Northwest | 33.8 | +0.7 | 961 | -28 | 5794 | -961 | 1.88 | 0.00 | 4.03 | +0.84 | 6.6 |
| North Central | 32.4 | -0.4 | 1004 | +5 | 5837 | -992 | 2.27 | +0.31 | 6.33 | +2.68 | 7.5 |
| Northeast | 34.4 | +0.3 | 940 | -16 | 5547 | -1007 | 2.48 | +0.51 | 6.22 | +2.13 | 6.7 |
| West Central | 37.3 | +1.5 | 855 | -54 | 5397 | -891 | 2.41 | +0.30 | 4.52 | +0.81 | 3.7 |
| Central | 36.8 | +0.9 | 867 | -34 | 5198 | -1050 | 2.74 | +0.55 | 5.74 | +1.61 | 4.0 |
| East Central | 38.1 | +0.9 | 828 | -34 | 5029 | -937 | 2.78 | +0.50 | 5.17 | +0.40 | 5.1 |
| Southwest | 41.2 | +2.8 | 732 | -93 | 4837 | -919 | 2.95 | +0.72 | 5.05 | +0.98 | 0.2 |
| South Central | 40.5 | +2.3 | 752 | -78 | 4768 | -1000 | 2.72 | +0.43 | 4.59 | +0.17 | 1.2 |
| Southeast | 40.8 | +1.3 | 743 | -47 | 4553 | -953 | 2.94 | +0.37 | 4.91 | -0.49 | 1.2 |
| STATE | 37.0 | +1.1 | 861 | -40 | 5252 | -971 | 2.55 | +0.40 | 5.17 | +1.05 | 4.2 |

* Departures are computed from 1981-2010 normals.

The weather data in this report are based upon information collected by the U. S. Dept. of Commerce, NOAA National Weather Service.

State Climatologist, Iowa Dept. of Agriculture & Land Stewardship
 COUNTY PRECIPITATION ESTIMATES, MARCH 2017 (inches)



State Climatologist, Iowa Dept. of Agriculture & Land Stewardship
 COUNTY SNOWFALL ESTIMATES, MARCH 2017 (inches)

